

Work Order ID 153299-1

153299

Page 1

Tuesday, November 15, 2016 1:42:35 PM

Item ID: D3801-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Hand Retractable Spring Plunger

Start Date: 11/18/2016 Start Qty: 12.00

12

Cust Item ID:

Required Date: 12/2/2016 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

DAS

Date: NOV 15 2016

Tooling:

Date:

Run Start

NR1

QC:

21

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3801

B

100

0.00

100

Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O:

Purchase Part Number: KBP-504

Supplier: Essentra

Certificate of conformity is required

12

NOV 16 2016

DAS
13
9-89

110

0.00

110

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

0.04

Packaging

Ensure material certification is attached

10

NOV 24 2016

DAS
6
9-89

120

0.00

120

QC

QC6- Inspect dimensions to drawing

Memo

0.00

Quality Control

Ensure Material certification comply to Dwg D3801

10

DAS
38
9-89
NOV 25 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Work Order ID 153299

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153299

Page 2

Item ID: D3801-1**Accept*****N900040100*****Setup Start *NS1*****Revision ID:****Stop *NS2*****Item Name:** Hand Retractable Spring Plunger**Start Date:** 11/18/2016 **Start Qty:** 12.00***12*****Cust Item ID:****Required Date:** 12/2/2016 **Req'd Qty:** 12.00***12*****Customer:****Reference:****Approvals:****Process Plan:** _____**Date:** _____**Tooling:** _____**Date:** _____**Run Start *NR1*****QC:** _____**Date:** _____**SPC (Y/N):** _____**Date:** _____**Stop *NR2*****Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

130

Identify as per dwg & Stock Location: Stosy

0.00

130

Packaging

Memo

0.02

Packaging

10DA
6
9-8

NOV 25 2016

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.20

Quality Control

16/11/28DAS
21
9-89

NOV 25 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : _____							

Picklist Print

Tuesday, November 15, 2016 1:42:41 PM

Page 1

Work Order ID: 153299

153299

Parent Item: D3801-1

D3801-1

Parent Item Name: Hand Retractable Spring Plunger

Start Date: 11/18/2016

Required Date: 12/2/2016

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A 08-07-22 new issue DD verified by:EC
12.03.06 AS PER DWG REV.B DD VERF:EC

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
KBP-504		Purchased	No			110	Each	0.0000	1	12			
KBP-504									**	10			
Hand Retractable Spring Plunger										6			
										9-89			

NOV 24 2016

DQA: _____ Date: _____

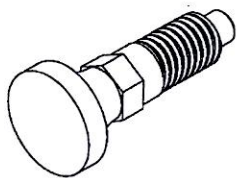
WORK ORDER NON-CONFORMANCE / UPDATE



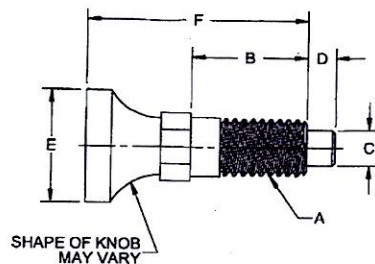
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																



SPECIFICATION CONTROL DRAWING



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 153299 MJS
16-11-15

D3801-X HAND RETRACTABLE SPRING PLUNGER

DART P/N	SUPPLIER	SUPPLIER P/N	'A' THREAD SIZE	'B' THREAD LENGTH	'C' NOSE DIAMETER	'D' NOSE LENGTH	'E' HEAD DIAMETER	'F' LENGTH	'G' WIDTH ACROSS FLATS	MATERIAL (BODY/ NOSE)	MATERIAL (KNOB)	TYPE	END FORCE (lbs)	WEIGHT (lbs)
D3801-1	REID SUPPLY COMPANY	KBP-504	3/8-24 UNF	0.67	0.197	0.20	0.83	1.71	0.50	303 SS	BLACK DELRIN	NON-LOCKING	2.7	0.01
D3801-3	REID SUPPLY COMPANY	PRT-22 OR PRT-22N	1/2-13 UNC	1.00	0.313	0.25	1.00	1.90	0.52	303 SS	WHITE DELRIN	NON-LOCKING	1.75	0.02

△

△

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A

RELEASED
2012-03-02

B	SUPPLIER P/N CHANGED: BODY/NOSE MAT'L WAS STEEL NOW STAINLESS STEEL. REF. CAR12-88		MB	12.02.24
A	NEW ISSUE		MB	08.06.19
REV.	DESCRIPTION		BY	DATE
DESIGN	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3801 REV. B TITLE HAND RETRACTABLE SPRING PLUNGER SCALE NTS		SHEET 1 OF 1	
DRAWN				
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				
DATE	12.02.24			

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

**ESSENTRA**

COMPONENTS

Essentra Components
2538 Speers Road, Unit 7
Oakville, ON L6L 5K9
Phone: 905-825-0134
Fax: 905-825-2919
www.essentracomponents.com

Packing List

LOAD NUMBER 509016
SID/INV 1474779
CUSTOMER PO PO34333
ORDER NUMBER 2235270
CARRIER Fed Ex Ground
SHIP DATE 11/23/16
FOB DESCRIPTION COL

SOLD TO 422854

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

DELIVERY TO 422854

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

LINE NO	PART NO. DESCRIPTION	ORIGINAL QUANTITY	QUANTITY SHIPPED	CTNS	NET WEIGHT	TOTAL WEIGHT
1	GRD21625375PA DIAPHRAGM GROMMET:TPR BLACK 1.65" HOLE X 0.094" 1000 BOX Cust Order #: PO34333 Country Of Origin: UK	.020	.020	1	.22	27.22
2	KBP-504 3/8-24 NON-LOCKING SS PULL INDEXING PLUNGER Cust Order #: PO34333 Country Of Origin: DE	12.000	10.000	10	.47	1.47

16/11/24
SD

DAS
38
9-89

Certificate of Compliance

This is to certify that the above material shipped against your purchase order is in conformance with all known requirements, specifications and drawings in effect at the time of manufacture. All applicable physical, functional, dimensional and material test reports are on file at our facility, and may be inspected by your representative upon request.

Richard Queer
Quality Assurance Manager



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO34333**

Purchase Order Date 11/16/2016

PO Print Date 11/16/2016

Page Number 1 of 2

Order From :

VC-ESS001

ESSENTRA COMPONENTS
P.O. BOX 9900 T-9915
POSTAL STATION A
TORONTO, ONTARIO M5M 2J2
CANADA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
NOV 16 2016

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via:

FedEx Economy collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	GRD21625375PA AS PER DWG D4440 REV. A B153108	Diaphragm Grommet 	11/23/2016 No 11/23/2016		20.00 Each	\$2.41	\$48.18
Line Total:							\$48.18
2	KBP-504 AS PER DWG D3801 REV. B B153299	Hand Retractable Spring Plunger DAS 38 3-89	11/23/2016 Yes 11/23/2016		12.00 Each 14/14/24 SLP	\$24.46	\$293.52
Line Total:							\$293.52

Note:

11/16/2016